

CSR Report

Survey Report: Reviewer Feedback on CSR's Review Integrity Training Module

Office of the Director

September 21, 2023

Introduction

The mission of the Center for Scientific Review (CSR) is to ensure that National Institute of Health (NIH) grant applications receive fair, independent, expert, and timely scientific peer reviews that are free from inappropriate influences. In 2022, CSR created an online review integrity training module (an updated version of the Review Integrity training module that was developed in 2019). This training focused on potential integrity concerns specific to NIH peer review and aimed to give reviewers tools to prevent integrity violations. This report presents results from a survey that was included in the training in order to gather reviewer feedback regarding the value of the training and to inform future iterations. The survey measured different aspects of the training to help identify knowledge gained and useful content from the training. The survey also assessed reviewers' perceptions of and behaviors regarding review integrity violations in the year prior to the training. Write-in items gathered reviewer comments about review integrity in NIH review and recommendations for improving the training. See [Appendix A](#) for methods and a synopsis of the training.

Results

For the January 2023 Advisory Council round, 9,158 reviewers were asked to take the integrity training, with 7,072 completing the training—for a training completion rate of 77%. Among those reviewers that completed the training, 6,206 took the optional survey at the end of the training—for a survey response rate of 88%.

Key findings

- 56% of reviewers stated that NIH has a “moderate” or greater problem with breaches of review integrity.
- 12% of reviewers indicated that they have encountered or suspected at least one breach in review integrity in the last year. Among reviewers who suspected a breach, 59% did not contact an NIH official to report it. 93% of reviewers thought the training substantially increased their level of comfort to reach out to the scientific review officer (SRO) or others at NIH to discuss events or concerns related to review integrity.
- Over 90% of reviewers thought that the training substantially helped them become more aware of how breaches in review integrity can occur and improved their ability to identify potential breaches in review integrity.
- Over 90% of reviewers stated the training substantially helped them understand how to navigate conversations with colleagues to maintain review integrity and know how to respond to others who request sensitive or confidential information about a review.

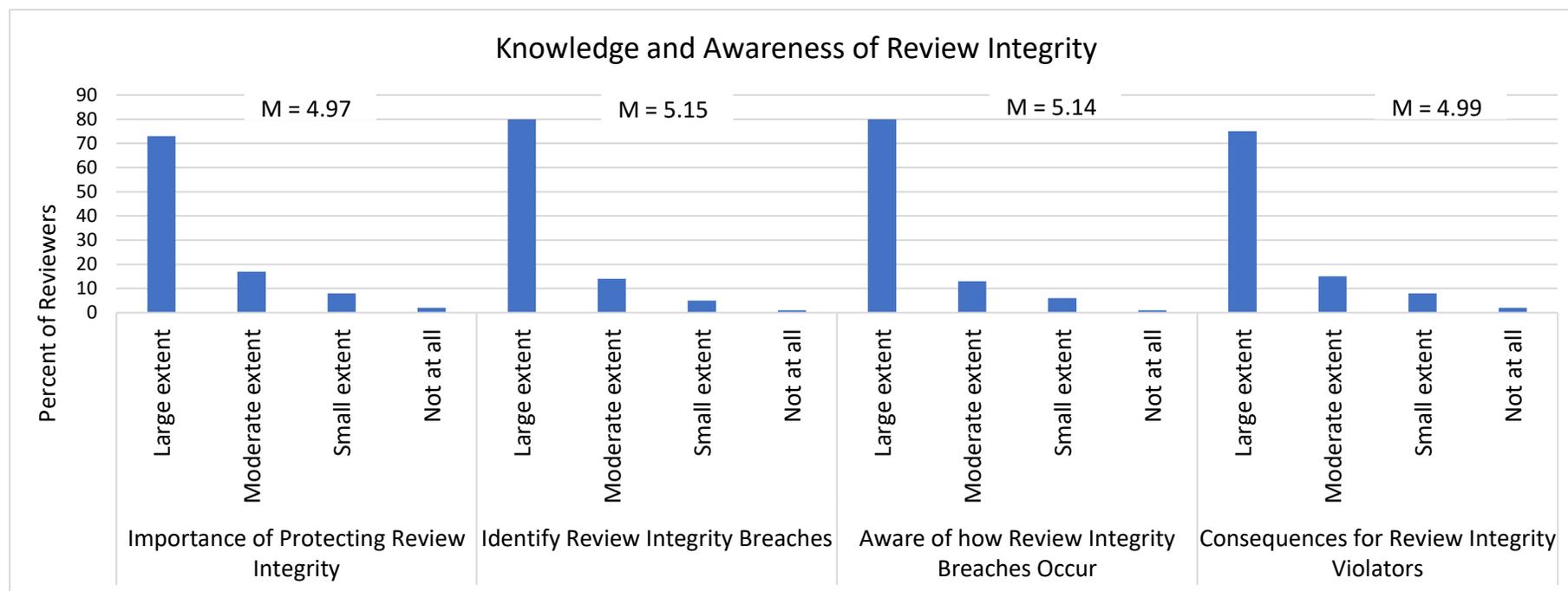
- 90% of reviewers were highly satisfied with the training and 80% found the specific interactive training activities very useful.
- Results of the qualitative analysis of open-ended comments (n = 1,223) were consistent with many of the quantitative findings. Reviewers stated that the training increased their understanding of integrity violations and helped them become better prepared to deal with integrity concerns in the future. They thought that the training would be especially beneficial to new reviewers and strongly recommended that the training be shared with applicants. Reviewers also enjoyed the scenarios and requested that future trainings be updated to include more scenarios, including more complex and nuanced scenarios of integrity violations. Multiple comments praised SROs for strong proactive work to maintain peer review integrity. Others thought that the training should be required on a regular basis.

Item analyses

1. *To what extent did the training help you in the following areas?*

- The great majority (70-80%) thought the training helped them “to a large extent” understand the importance of protecting review integrity for identifying the highest impact science, identify potential breaches in review integrity, become more aware of how breaches in review integrity can occur, and know the potential consequences and actions taken against those who violate review integrity.

Figure 1. Helpfulness of Training for Reviewers’ Knowledge and Awareness of Integrity in Peer Review

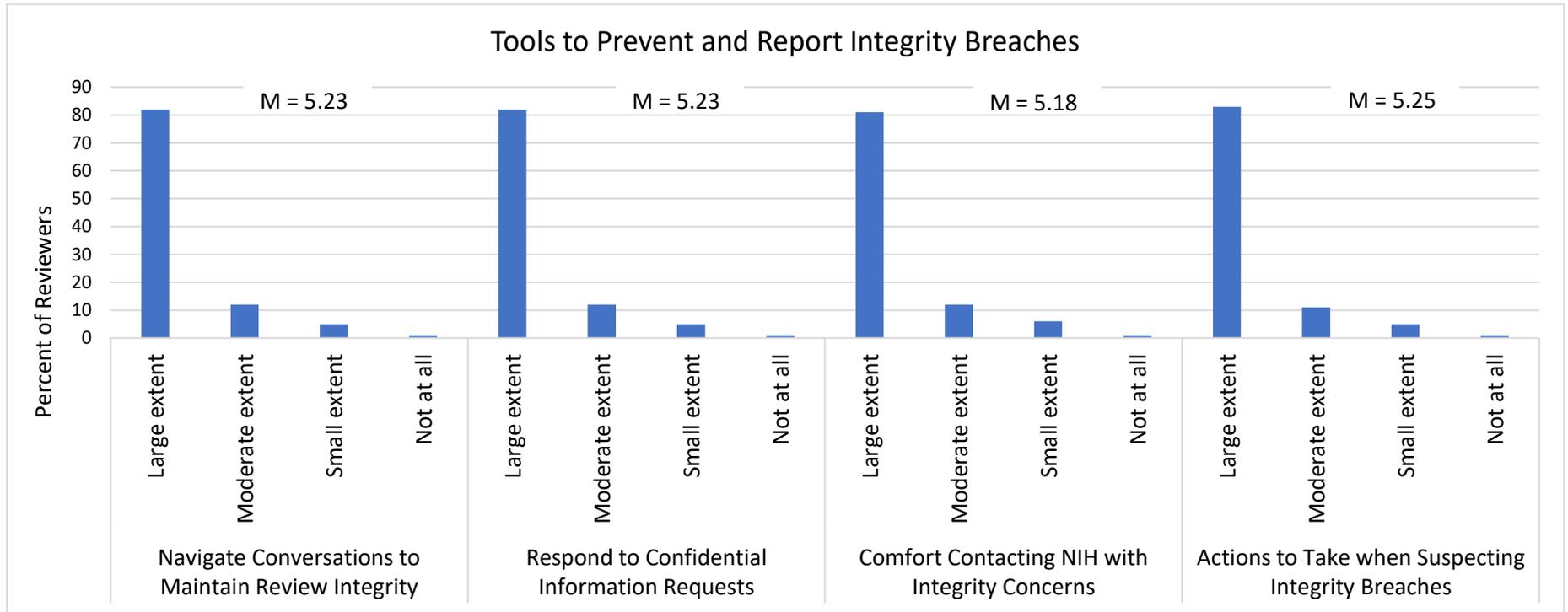


Note. Items use a 6-point scale where 6 = “very large extent” and 1 = “not at all.” The mean (M) is the mean of those numeric scores. For ease of presentation, very large” and “large” were grouped together and defined as “large”, and “very small” and “small” were grouped together and defined as “small.”

2. *To what extent did the training help you in the following areas?*

- Most reviewers (~80%) thought the training helped them “to a large extent” understand how to navigate conversations with colleagues to maintain review integrity, know how to respond to others who request sensitive or confidential information about a review, feel more comfortable reaching out to the SRO/NIH to discuss events or concerns related to review integrity, and understand what action to take when suspecting a breach in review integrity.

Figure 2. Helpfulness of Training for Providing Reviewers with Tools to Prevent and Report Integrity Breaches

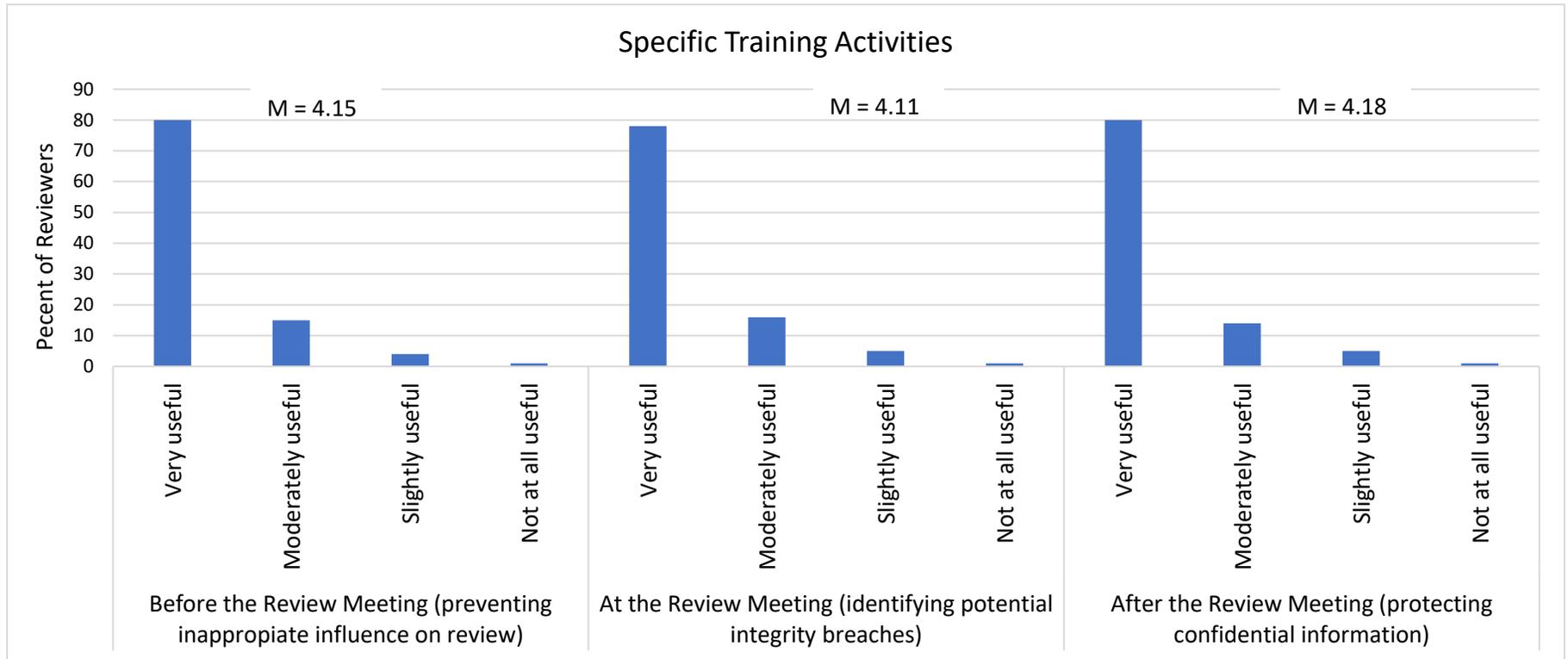


Note. Items use a 6-point scale where 6 = “very large extent” and 1 = “not at all.” The mean (M) is the mean of those numeric scores. For ease of presentation, very large” and “large” were grouped together and defined as “large”, and “very small” and “small” were grouped together and defined as “small.”

3. *How useful did you find the following training activities?*

- ~80% of reviewers thought that all the specific training activities were very useful.

Figure 3. Usefulness of Specific Training Activities

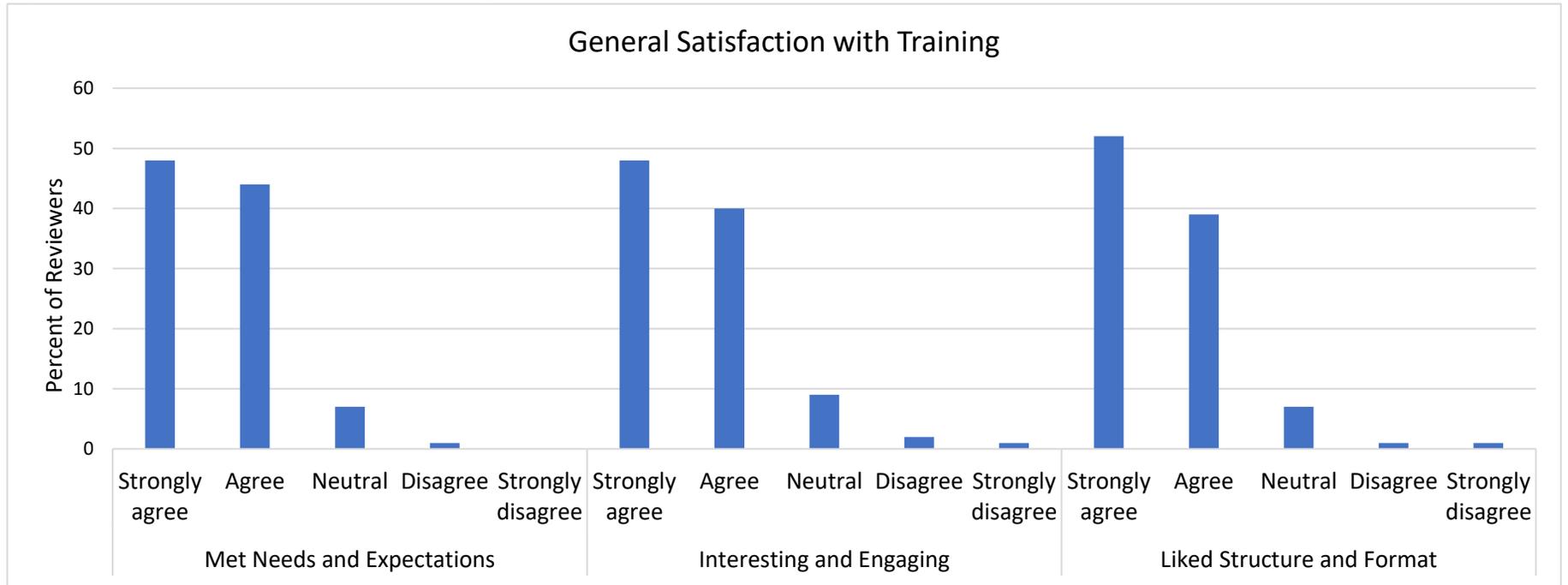


Note. Items use a 5-point scale where 5 = “extremely useful” and 1 = “not at all useful.” The mean (M) is the mean of those numeric scores. For ease of presentation, “extremely useful” and “very useful” were grouped together and defined as “very useful.”

4. Please mark how strongly you agree or disagree with the following statements.

- 90% of reviewers said the training was engaging and met their needs and expectations.

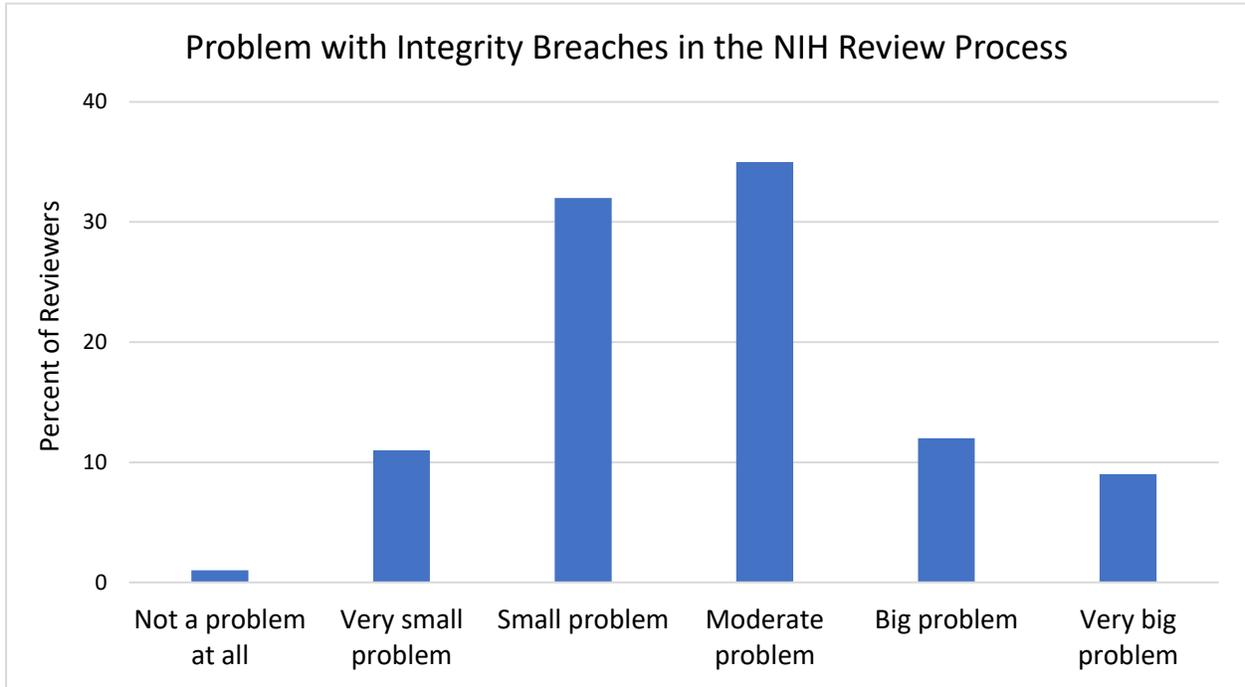
Figure 4. General Satisfaction with the Training



5. *To what extent do you think violations or breaches of review integrity are a problem in the NIH review process?*

- Most reviewers believe that NIH has a problem with breaches of review integrity, with 21% considering it a “big” or “very big” problem.
- ~40% believe review integrity breaches are a small or very small problem at NIH.

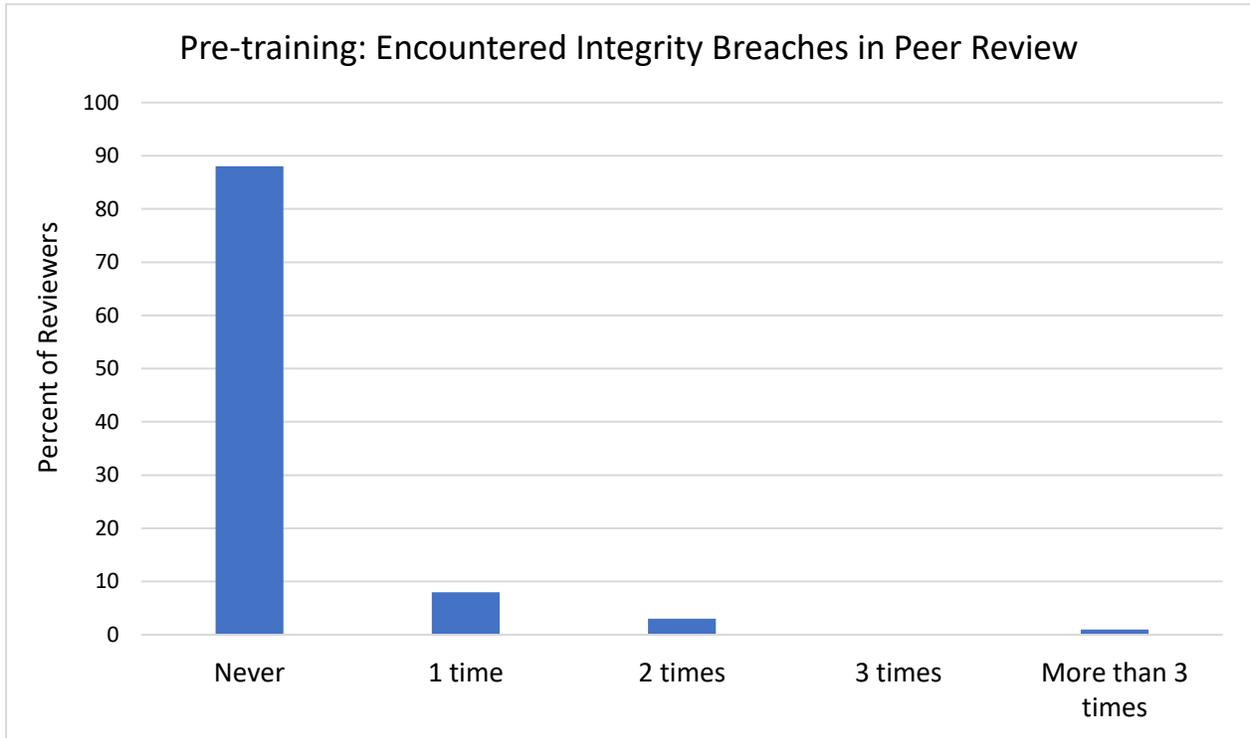
Figure 5. Review Integrity Breaches as a Problem in the NIH Review Process



6. *In the last year, how often did you encounter or suspect breaches in review integrity at NIH (e.g., breaches of confidentiality, an applicant or reviewer trying to tamper with a review, conflict of interest violations)?*

- 12% of reviewers indicated that they have encountered or suspected at least one breach in review integrity in the last year.

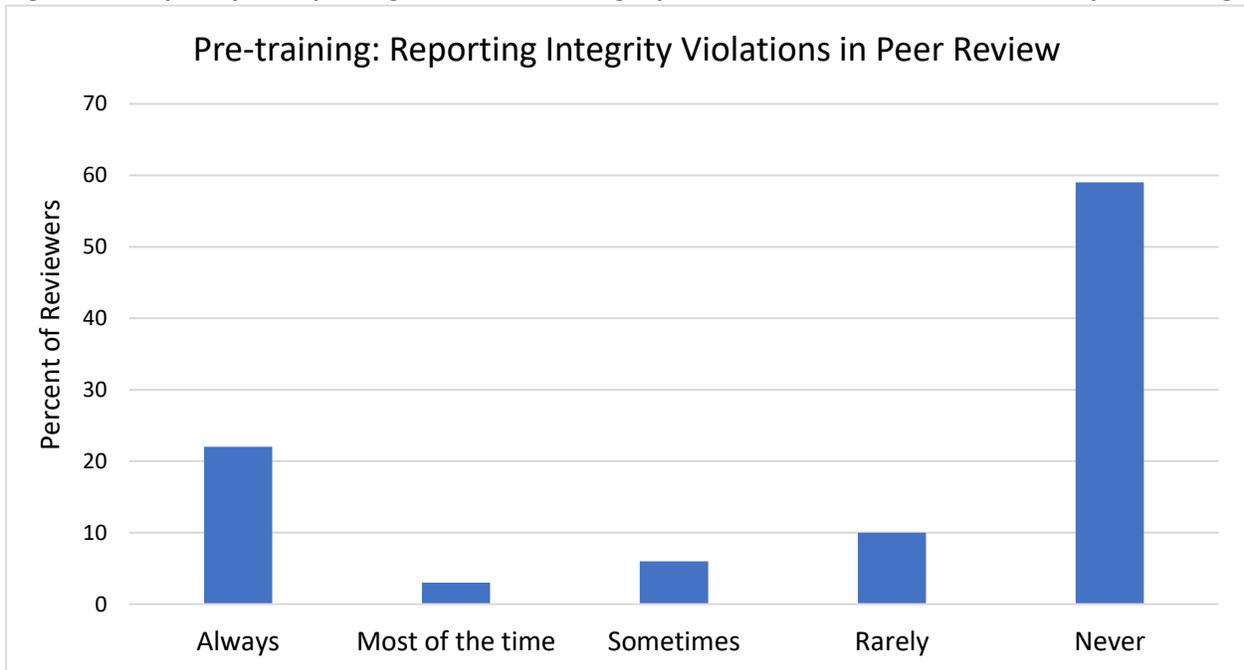
Figure 6. Encountered or Suspected Review Integrity Breaches in the Last Year (pre-training)



7. In the last year, how often did you reach out to an NIH official when you thought a breach in review integrity was present or possible?

- In the last year, most reviewers (~70%) rarely or never reached out to an NIH official when they suspected a review integrity breach.
- Only ~20% indicated that they always contacted a NIH official when they suspected a review integrity breach in the last year.

Figure 7. Frequency of Reporting Peer Review Integrity Violations to NIH in the Last Year (pre-training)



8. *Do you have a specific review integrity concern that you would like to share with us or want to discuss the comment(s) you entered above (Q8)? If yes, a representative from CSR will get in contact with you soon.*
- 20 reviewers requested that CSR contact them. Of these, 4 cases were specific and actionable enough that they were forwarded to the CSR Review Integrity Officer (RIO).

Qualitative Survey Results

Please share any general comments about review integrity at NIH or recommendations for improving this training.

- Among those who responded to the survey (n = 6,206), 20% provided comments to the open-ended text question (n = 1,223).

Common and Salient Themes

Listed below are the themes identified in the comments, followed by some examples that help capture the sentiment (see Appendix B for additional themed comments).

1. **General Satisfaction and Value of the Training:** The great majority of reviewer comments were those of thanks and appreciation for the training. Reviewers were highly satisfied with the training and thought that the training was very useful and structured in a very nice and engaging format. They stated that the training increased their understanding of integrity violations and helped them become better prepared to deal with integrity concerns in the future. Overall, reviewers thought the training was great and highly recommended it, with many requesting that the training be required on a regular basis.
 - a. “I really appreciate the efforts being made by the NIH to maintain review integrity...”
 - b. “This training is great initiative from CSR.”
 - c. “This is an excellent presentation. Well worth my while.”
 - d. “I thought the format was very clear, engaging, and digestible.”
 - e. “This training was great--both informative and engaging. Trainings like this are often super boring but this one wasn't!”
 - f. “I really enjoyed this training. It solidified my understanding of review integrity and has also given me very important tools to handle potential breaches of integrity and courses of action.”
 - g. “This is an important training. Although I have not experienced an attempt to breach the confidentiality of the review process, I am now more aware of the steps that I should take should such an attempt occur in the future.”
 - h. “I thought the content was very well prepared. It informed me of what to do in certain ambiguous situations that I was not aware of could occur or had not considered in advance how to respond.”

[Additional comments on General Satisfaction and Value of the Training](#)

2. **Enjoyment of Scenarios and Appreciation for Communication Tools:** Reviewers stated the scenarios were very practical and made the training very engaging. They appreciated the vivid examples and real-world cases displayed in the scenarios; and were especially thankful for the concrete communication strategies and techniques on how to avoid and address potential integrity breaches. Many reviewers requested more scenarios to watch and learn from, with some even giving specific examples of integrity issues that they would like to see addressed in scenarios of future trainings.

- a. "I thought the scenarios were FANTASTIC!"
- b. "The "real-life" scenarios are an excellent approach to illustrating what problems might arise and how a reviewer might navigate them. Good job!"
- c. "This training was great! Very grounded in realistic scenarios, and very useful and actionable. Great work!"
- d. "I appreciated the real-life examples and real-life solutions to how to handle the breaches of confidentiality."
- e. "My favorite part was the examples of how to get out of those tough situations. I now have useful tools to use for any future problematic interactions. Thank you!"
- f. "The scenarios presented were very helpful - they were representative of incidences that might occur and provided graceful ways to avoid conflict."
- g. "I liked how the scenarios were subtle and true-to-life rather than extreme examples of violations."
- h. "I love the case-based lessons. More of those if time is available."

[Additional comments on Enjoyment of Scenarios and Appreciation for Communication Tools](#)

3. **Strongly Recommended for Applicants and New Reviewers:** While most reviewers found the training useful and thought that it should be required for all reviewers, many thought that the training would be especially useful for new reviewers and applicants. Some more experienced reviewers (who were already aware of these integrity issues) felt that the training was not that beneficial to them but strongly recommend it for new and irregular reviewers. Reviewers were also adamant that the training be shared with applicants and believed that the training could teach applicants how to avoid inappropriate behaviors and interactions with reviewers.

- a. "Cannot say enough how important the review integrity is for the NIH. This is an essential training for all reviewers."
- b. "As an early-stage reviewer, this training was very helpful in understanding review integrity and potential ways of responding if a breach in integrity should arise."
- c. "Presentation was informative, but I have served as a reviewer for many, many years and so I am pretty familiar with the issues. But this would be great for newer reviewers."
- d. "The interactive module is likely the most efficient specifically for new reviewers. I would have liked that a lot when I started to serve as a reviewer, however, I felt quite familiar with all topics."
- e. "The training was very well designed and presented, and I expect that it is VERY helpful to new reviewers. I have served as a reviewer for NIH and NSF, as well as other agencies, for more than 30 years, so it was not helpful to me."
- f. "This training module was very informative and would be useful training to also share with applicants so they understand the review integrity process and what they can and cannot ask reviewers."
- g. "I appreciate ongoing training on this topic. I wonder if there's a way to require applicants to take a version of the training as well, so they are less likely to put reviewers in awkward positions."

- h. “This is a very important training that I wish was shared with applicants. I feel like applicants are always looking into who is in the study section and try to gain favor by inviting to seminars, or planning lab visits etc.”

[Additional comments on Strongly Recommended for Applicants and New Reviewers](#)

4. Experiences with Review Integrity Breaches and the Most Frequently Mentioned

Breach: Reviewers also gave examples of integrity breaches that they have either observed directly, heard about from other colleagues, or committed themselves. The integrity breach that reviewers most frequently mentioned in the survey was reviewers revealing to others (generally during a panel meeting) that they reviewed the original submission for an A1 resubmission application. Reviewers believed that these breaches were almost always accidental and recommended that SROs remind reviewers of this pitfall before discussing resubmissions. Some reviewers explicitly stated that they did not know that referencing their review of a prior submission during review was an integrity breach. Some reviewers, mainly long-term, experienced reviewers, also noted that they have seen decreases in integrity breaches over the years and had not experienced any breaches in recent years.

- a. “Useful training for a new reviewer. However, after doing this for some may years it's pretty much repeating the things I've known for a long time. The one new bit of info was not identifying as a previous reviewer on a resubmission.”
- b. “I've seen reviewers (inadvertently) identifying themselves as a reviewer or mentioning the discussion at the prior review for resubmitted applications. These could easily be prevented by SROs clearly stating the rules about the resubmissions.”
- c. “I found this to be interesting and informative. I also realized that I have mentioned recall of the prior application during a study section meeting. I will not make that error again because of this training.”
- d. “Very interesting - I may have been guilty in the past of saying something like "I was a reviewer in the previous application" ... not anymore.”
- e. “While I have not encountered any breaches, I have heard through friends and colleagues of inappropriate behavior. It is difficult to know if those breaches were reported since people seem to hesitate to report others.”
- f. “I've always heard rumors about applicants having "friends in the system" who ensure that grants fly through. It's disheartening and demotivating. I'm glad NIH is addressing it.”
- g. “I personally have heard prominent investigators who were friends tell each other that "don't worry XYZ I will take care of you" regarding an upcoming grant review. That was 10 years ago now and I haven't seen or heard of anything like this since.”
- h. “In over 20 years reviewing for NIH, I have only encountered a handful of suspected breaches of review integrity. I believe I handled them OK but if I had had this training 10 or 20 years ago, I would have handled them better.”
- i. “I believe this was a big issue in past decades but have not encountered it in recent years.”
- j. “In the past, I have been aware of information "leaking" out. However, that seems to be happening much less. So, the NIH's efforts are making a difference.”

[Additional comments on Experiences with Review Integrity Breaches and the Most Frequently Mentioned Breach](#)

5. **The Role of NIH and SROs in Preventing and Intervening on Review Integrity**

Breaches: Reviewers credited the maintenance of review integrity to the great work of NIH and SROs. Reviewers gave accounts of times when their SRO would intervene during a meeting to prevent a breach, take corrective action to address a breach that was already present, and remind them about review integrity principles before and after the meeting. Many praised their SROs for the integrity training they provide, for being responsive to their integrity concerns, and for doing an overall excellent job of reinforcing and maintaining review integrity. They also applauded NIH for their review integrity training efforts and recommended that review integrity trainings, refreshers, reinforcements, and reminders (e.g., updated trainings with new scenarios, reminder emails for each review cycle, SRO announcements at the beginning and end of meetings) occur on a regular basis, even required annually or bi-annually (for full trainings) in order to maintain a high standard of integrity at NIH.

- a. “Our SRO is very good on rapidly stop a breach of confidentiality during the meeting (e.g., reference to a prior discussion or prior submission) and to remind us about confidentiality before and after the meeting.”
- b. “The most common breaches seem to occur in review meetings when the SRO is present and takes corrective action.”
- c. “SROs are very supportive and encouraging as far as being proactive in sharing concerns regarding review integrity.”
- d. “The SROs I have worked with have done an excellent job at reinforcing reviewer integrity in preparation of the study section reviews.”
- e. “I have been fortunate to work with great SROs who have given us great training on this already, so this was a bit repetitive with that, but I am glad CSR is doing this because I imagine that is not the case for everyone.”
- f. “The NIH and the SROs I've interacted with have done an exceptionally good job at maintaining integrity in the review process. They set an excellent paradigm for other funding organizations both within the US and outside to follow. Keep up the good work.”
- g. “I think the training and information is highly appropriate, and it should be updated/changed on an annual basis for alternative scenarios that illustrate breaches of review integrity and required for all reviewers on an annual basis.”
- h. “I agree that this training should be mandatory for all who serve on study sections.”
- i. “This is important to do annually to maintain a culture of review integrity.”
- j. “Review integrity at NIH was a bigger problem many years ago. I believe the training and emphasis that NIH is placing now is helping to prevent breaches.”
- k. “It is great to see the NIH takes review integrity so seriously.”

[Additional comments on The Role of NIH and SROs in Preventing and Intervening on Review Integrity Breaches](#)

- ## 6. **Recommendations to Improve Training:** Overall, reviewers were highly satisfied with the training and did not provide many recommendations to improve the training. Requests to include more scenarios was the number one recommendation. Some reviewers also thought that the training was too basic and obvious and wanted to see more complex and nuanced examples of integrity violations. These comments most often came from reviewers who had

served as reviewers for a very long time (i.e., experienced reviewers) and felt that the training was not that beneficial for them. And last, some reviewers requested that the pace of the training (i.e., the narration and speed of the slides) be increased or go faster to reduce the amount of time needed to complete the training. This latter request has been implemented.

- a. "I was very focus, with very good examples and appropriate timing. Just one recommendation: include more examples."
- b. "I love the case-based lessons. More of those if time is available."
- c. "Excellent training. I have no suggestions other than the possibility of including additional scenarios. Not that this is necessary, but I appreciate the light the scenarios shed on possible situations and critical analysis of such situations."
- d. "Much of the information was basic, at least to someone who has many years of experience, and who has to go through training with an SRO at least 3 times a year."
- e. "This is useful for new reviewers, for seasoned ones: been there, seen that. This is not very informative."
- f. "The information of the training was very basic, things that we all knew already."
- g. "The examples were not very nuanced. I think more complicated examples would be good."
- h. "I think the training should review the gray areas more. Most examples are so obvious that nobody would do this."
- i. "I found the training to be very helpful, but thought the pace was too slow. Please provide a means to speed it up."
- j. "It was a bit slow, and I would have appreciated being able to speed it up slightly (i.e., 1.25x speed?) but otherwise was good, practical, and the scenarios were realistic and helpful."

[Additional comments on Recommendations to Improve Training](#)

Appendix A

Methods

Training Module

CSR's Review Integrity training module 2.0 is an updated version of the Review Integrity training module that was developed in 2019 with input from the [CSR Advisory Council Working Group on Review Integrity](#). The updated module refreshes reviewers' awareness and knowledge of review integrity and uses new technology to stimulate learning via increased reviewer interactivity and engagement. The module uses several real-life scenarios across the peer review process to increase awareness of what constitutes a breach in review integrity and to provide reviewers with tools to navigate situations that could result in a breach. The training starts with a scenario before the review meeting in which a reviewer is navigating a conversation during a seminar visit with an applicant who is attempting to influence the review process. The training then engages reviewers in an activity in which seven different scenarios are played out during a review meeting; the reviewers are asked to identify whether a breach in integrity has occurred in each scenario. The training ends with a scenario after the review meeting in which a reviewer is navigating a conversation with an applicant who is attempting to garner confidential information about the review; at different points in the conversation, reviewers are asked to identify what information the reviewer can share with the applicant.

Participants

Participants were 6,206 reviewers who participated in 420 CSR study section meetings between September and December 2022.

Survey Administration

All reviewers received the training four weeks before their Fall 2022 review meeting. The survey weblink was located at the end of the training module. Reviewers were told that the survey was optional, that their responses would be kept private, and that the survey would take about five minutes to complete. All surveys returned by January 5th, 2023 were included for analysis.

Measures

Knowledge and Awareness of Peer Review Integrity

Four items asked reviewers to rate on a scale from 1 (not at all) to 6 (very large extent) how the training helped them in the following areas: a) understand the importance of protecting review integrity for identifying the highest impact science, b) identify potential breaches in review integrity, c) become more aware of how breaches in review integrity can occur, and d), know the potential consequences and actions taken against those who violate review integrity. The scale was later recoded into a 4-pt. scale with values 6 (very large extent) and 5 (large extent) grouped and redefined as "large extent" and values 3 (small extent) and 2 (very small extent) grouped and redefined as "small extent."

Tools to Prevent and Report Review Integrity Breaches

Four items asked reviewers to rate on a scale from 1 (not at all) to 6 (very large extent) how the training helped prepare them to prevent and address review integrity breaches or potential breaches in the future for the following areas: a) understand how to navigate conversations with colleagues to maintain review integrity, b) know how to respond to others who request sensitive or confidential information about a review, c) feel more comfortable reaching out to the SRO/NIH to discuss events or concerns related to review integrity and f) understand what actions to take when suspecting a breach in review integrity. The scale was later recoded into a 4-pt. scale with values 6 (very large extent) and 5 (large extent) grouped and redefined as “large extent” and values 3 (small extent) and 2 (very small extent) grouped and redefined as “small extent.”

Usefulness of Specific Training Activities

Three items asked reviewers to rate on a scale from 1 (not at all useful) to 5 (extremely useful) how useful they found the following specific training activities: a) *Scenario 1: Before the Review Meeting*—navigating interactions with an applicant who is trying to influence the review outcome during a seminar visit prior to a study section meeting), b) *Scenario 2: At the Review Meeting*—identifying potential review integrity violations during a study section meeting), c) *Scenario 3: After the Review Meeting*—navigating an interaction with an applicant who is trying to get confidential information after the study section meeting. The scale was later recoded into a 4-pt. scale with values 5 (extremely useful) and 4 (very useful) grouped and redefined as “very useful.”

General Satisfaction with Training

Three items asked reviewers to rate on a scale from 1 (strongly disagree) to 5 (strongly agree) their general satisfaction with training for the following items: a) the training met my needs and expectations, b) the training was interesting and engaging and c) liked the structure and format of the training.

Problem with Integrity Breaches in the NIH Review Process

One item asked reviewers, to what extent do you think violations or breaches of review integrity are a problem in the NIH review process?; this item was on a scale from 1 (not a problem at all) to 6 (very big problem).

Encountered or Suspected Review Integrity Breaches in Peer Review

One item asked reviewers, in the last year, how often did you encounter or suspect breaches in review integrity at NIH (e.g. breaches of confidentiality, an applicant or reviewer trying to tamper with a review, conflict of interest violations)?; this item was on a scale from 1 (never) to 5 (more than 3 times).

Reporting Breaches

One item asked reviewers in the last year, how often did you reach out to an NIH official when you thought a breach in review integrity was present or possible? This item was on a scale from 1 (never) to 5 (always).

General Comments

In an open-text box, reviewers were given the opportunity to share any general comments about review integrity at NIH or recommendations for improving this training.

Request to be Contacted

One item asked reviewers, do you have a specific review integrity concern that you would like to share with us or want to discuss the comment(s) you entered above (Q8)? If yes, a representative from CSR will get in contact with you soon. This item was on a yes or no scale.

Appendix B. Additional Themed Comments

Table 1. General Satisfaction and Value of the Training

This training material is well presented and very informative. Perfect! Thank you!
I thought the training was really well done. It seemed clear to me that this was based on real examples. Thank you for this. Short, engaging, and useful!
This was a well-done module. I appreciate the work that went into it, and I think it is effective. Thank you.
This was really helpful and made me reflect on my own actions in the past- this training will make be a better steward of confidentiality moving forward
This training was very well done. The situations presented could happen and I appreciated the thought put into the examples and responses. Thank you.
The format for this training was very engaging, and the materials were of high quality - congratulations!
The video and quiz format were engaging. The 'scenario' content was informative
Very informative and interactive training, especially the different scenario trainings.
Very well done! Examples were great and interactive pieces were effective.
I appreciate that this training involved the ways breeches/conflicts could occur before, during, and after the meeting. Made things much clearer.
I thought the content was very well prepared. It informed me of what to do in certain ambiguous situations that I was not aware of could occur or had not considered in advance how to respond.
Although I have not encountered any review integrity issues in the past, I learned how to handle the situation had it arisen. This training therefore is very useful to prevent any problems from happening
The training is very helpful; learned how to deal with possible integrity breaches.
I agree that this training should be mandatory for all who serve on study sections.
This was a good course that made me more aware of possible violations of review integrity.
This is a very important topic and should be offered every year for reviewers. Thanks.
Good format for the training, and I agree with providing integrity training such as this on a regular basis.
This is a necessary training that should be taken at least every two years...

Table 2. Enjoyment of Scenarios and Appreciation for Communication Tools

The scenarios and the questions within the scenario are thought-provoking and a good way to learn.
It is an excellent training session. It is informative and the case studies were helpful to learn how to respond to avoid the violation of integrity.
I really enjoyed this training as the scenarios portrayed felt extremely realistic and the training also provided helpful language should I happen to encounter similar situations.
A very informative and important training session. Provided real-life context on how best to address situations/interactions where/when breach of confidentiality is suspected.
This training not only identified scenario of possible breach, but it also provides suggestions about how to handle them. I think they are very helpful.
I really like the scenarios and how they provide real-world examples of how to respond in certain situations.
Really like examples of what to do when a colleague asks you questions and puts you in an uncomfortable position.
Very helpful scenarios and checks for appropriate responses
Well put together video/training. mostly obvious, but yet good to be reminded, especially on ways to graciously fend off potential breaches
Great training!! Love the scenarios!
Thanks, this was quite useful. I particularly liked demonstrating the breaches via real world use cases and also reviewing information regarding how to navigate and report breaches.
Great training that examined the subtleties of possible breaches of integrity. Appreciate it!
The training was good because it included subtle situations that make it more challenging to address.
I would like to see a section on the breaking on confidentiality for a reviewer, who after the study section, then begins work in the area of study for a grant that was reviewed in the Study Section.

Table 3. Strongly Recommended for Applicants and New Reviewers

Informative and important training that all reviewers and applicants should watch.
This training should be enforced much before the actual study section. Especially important for new reviewers.
New reviewers should only be allowed to review only after all reviewer's trainings are completed.
This was very helpful guidance as a new reviewer. Thank you!
I am a new reviewer. This training is necessary and helpful even for experienced reviewers.
This was an excellent session and I recommend not only to reviewers but also to applicants.
This training will be good for both NIH reviewers and applicants who plan to submit grant to the NIH.
As reviewers it is important to maintain review integrity. For applicants, they also need to receive training or be notified about what they should not do.
...Perhaps the applicants should take it for knowledge.

This is a great training. The applicants for NIH grants should take it too.
It is important for NIH grant applicants to know this information. It should be shared with all applicants.
It was a great video. Not only reviewers but only applicants should watch this video.
All applicants, not just reviewers, should take this training.
I liked this training. It would be nice if applicants also took this sort of training prior to submission or review.
...A similar training for applicants on what the NIH's expectations are regarding integrity be maintained as an applicant can be educational and help minimize untoward scenarios.
Very good for new reviewers. Pretty easy for experienced reviewers. I did learn that you should not try to probe a potential breach: good advice!
As a very experienced reviewer, I did not find the training added anything I don't know. However, I think it is very valuable for those with less experience. And a refresher for everyone doesn't hurt.
For those of us who have been reviewers for many years, I gained no new insights. It is appropriate for new reviewers.
This training was well done and would have been very useful when I was a new reviewer, but as someone who has been a reviewer for over two decades, it didn't reveal anything new.

Table 4. Experiences with Review Integrity Breaches and the Most Frequently Mentioned Breach

The types of breaches that I have experienced (that I indicated in an earlier question) were examples for inadvertent disclosures like 'I was the reviewer for the previous application'.
It is important to identify a way to minimize breaches of confidentiality at the meeting, as I have heard numerous reviewers indicate their having reviewed an application on a prior submission. While this may be inadvertent, it happens all too often.
The only violation I've seen is a reviewer mentioning that they reviewed the original submission when discussing the revision. It was almost verbatim what was shown in the training, and the SRO was in the room at the time.
Most typical situation I encountered was reviewers for A1 identifying themselves (inadvertently) as the previous reviewers for A0. I have not encountered other issues...
SROs should indicate at the start of a review session that reviewers are not to comment on being a reviewer for an application that in the session is now under review as a resubmission.
SROs should also speak up at meetings and model how to correct reviewers when they say things like "I reviewed this application last time".
Minor breaches often occur regarding prior review of re-submitted grants or reviewers noting how they know applicants outside of the proposal.
...The breaches I am aware of occurred during study section and would be classified as inadvertent, like referring to prior review...
I frequently hear reviewers stating during meeting that they previously reviewed a specific grant. The SRO is present at these meetings, so I do not report them.

Good to see this training. In years past, have seen review integrity breaches and have even have colleagues tell me not to be concerned. More education is needed on this topic.
The seemingly innocuous integrity breaches during meetings have occurred at least once or twice but have always been pointed out by SRO.
I have served in study sections since early 80's and can recall less than a handful of situations like you describe. But I'm aware that this happens and can happen so thanks for re-sensitizing me on the issue.
Have had a reviewer who was previously involved in a project with my group and asked to be withdrawn as the design had the risk to overturn his belief (and profit). I pointed this out once i saw the list of study sections members - he was not removed.
My awareness was quite third hand -- of someone being told that their application had been triaged before the results were released.
I frequently hear of integrity breaches that occurred in a different discipline- I'd appreciate learning more about how/when to respond to secondhand information.
How do you stop the 'old boys network'? Heard many times that 'big' scientists just call up potential reviewers to ask about the meeting. How do you stop this? How do you also stop cronyism, which appears to happen so often.
Review integrity has improved considerably in the 8 years that I have been participating as a reviewer.
I agree with assessment that invitation to seminars or colloquia is hardest and also being asked pointed questions on panels. In the past I think it was worse and when it happened more than 5 years ago, I did report it.
This is my fifth study section over about four years. Over that time, I have observed a gradual but perceptible improvement in confidentiality and integrity, which was always pretty good.
I've been aware of some similar situations in the past, but not recently.
I have experienced very significant issues with review integrity, but this was not within the last year. This is very important but does not happen to me every year.
I have not encountered any breach recently. However, I have been contacted inappropriately by applicants in the past.
I had come across breaches of confidentiality in the past, but not in the last year.
I had reported an incident to an SRO when I observed a breach of COI/integrity, but it was more than a year. I was assured that the action was taken. So my answer to Q8 would be No.
I have been able to avoid or dispel attempts to get info about study section from applicants, so I have not had the need to report. However, I would absolutely be comfortable reporting if the need arises.

Table 5. The Role of NIH and SROs in Preventing and Intervening on Review Integrity Breaches

I served on the TME (now THI) study section, and the SRO is outstanding for maintaining review integrity.
The seemingly innocuous integrity breaches during meetings have occurred at least once or twice but have always been pointed out by SRO.
Nice to highlight the role of the SRO. I have done so to ask questions and found them very helpful.
...My SROs have been very responsive to email inquiries about conflicts etc.

I still think there are some challenging situations in determining when one should recuse oneself. In these situations, I have found it helpful to reach out to the SRO and explain my prior relationship to a PI or co-I and see what they think.
This training was very helpful in that it made clear that the SRO can be contacted about any issue, no matter how minor it may seem...
I think that people who have been reviewing for a while and well trained in this area as much of this info is discussed by SROs.
Much of the information was basic, at least to someone who has many years of experience, and who has to go through training with an SRO at least 3 times a year.
Seems pretty obvious the NIH is much more upfront about this than in decades past, and that's a good thing.
NIH is striving to recognize and educate reviewer about review integrity...
Good to send reminders out for each cycle!
I think continual reminders and trainings are important.
Continue to promote these concepts to address ongoing issue
This training should be enforced much before the actual study section. Especially important for new reviewers.
Maybe conduct this training in person before the meeting.
Would be good for SRO to repeat the 'rules' at each meeting.

Table 6. Recommendations to Improve Training

Providing more examples of navigating delicate situations is always helpful.
Perhaps add more example of potential inadvertent disclosures.
I think having the scenarios are helpful. It might be useful to have more that could happen during the meeting.
Provide more examples for before, during and after the meeting.
The video of different scenarios is reflecting real situations thus very helpful to better understand the integrity. More scenarios may be added.
Please include more real-life examples and the correct responses so that I will know how to react when I am in similar situations in the future.
More examples and how to navigate them.
Enjoyed the vignette – would appreciate slightly more nuanced examples.
The training was well done but could benefit from more scenarios that could be ambiguous in a real life setting to some.
This is excellent - I like the real-world examples. I think it's also helpful to speak more directly for the less blatant ways review integrity is compromised by what information gets shared or discussed during study section.
While I am sure egregious examples like the Dr. Maxwell scenario occur, I think the subtle and even unintentional beaches are more common and important to highlight.
The examples were clear cut and therefore, to me, obvious. Perhaps some more peripheral examples could be used that would warn reviewers of less obvious scenarios that might be problematic in real life.
These seemed very blatant conflicts. The more uncertain conflicts presented will help reviewers in the fuzzy unclear area.

Examples are a bit extreme. Nice to have examples of more subtle and clever potential violations.
I am already familiar with this training material as I have extensive experience of serving on study sections.
Having reviewed for a number of years, the information about confidentiality before, during and after a study section was not new. Hence my lower scoring on the survey.
Fine for new reviewers. Experienced reviewers already know this stuff.
I think when people have served a long time at study section (like me for 7 years,), you might let them skip this training.
Very good training. The video could proceed at a slightly faster pace.
It would be helpful to be able to view the video at 1.5x speed, but that option wasn't available. but it was still a quick but informative training.
I really thought the vignettes were effective. It would be nice if the pace were a little faster - it seemed especially slow.

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